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BY HAND DELIVERY

William F. Caton, Secretary Secretary Federal Communications Commission Room 222 1919 M Street, N.W. Washington, D.C. 20554 RECEIVED

TEB 1 3 1997

FEDERAL COMMUNICATIONS COMMISSION

Re: Notice of Ex Parte Communication in CC Docket 92-235

Dear Mr. Caton:

On behalf of the New York City Transit Authority (NYCTA), I spoke by telephone this morning with Ira Keltz of the Wireless Telecommunications Bureau regarding the referenced proceeding. I discussed with him the importance of classifying the New York City Transit Authority as a public safety entity in connection with any consolidation of private wireless frequencies. I also discussed the NYCTA's status as a governmental entity and noted that its activities have significant public safety implications. I provided him a copy of the NYCTA's comments, filed June 20, 1996, with the Public Safety Wireless Committee (PSWAC), for inclusion in the record in the referenced proceeding.

As required by the Commission's rules, I am enclosing two copies of this notice and the attachment.

Respectfully submitted,

Linda L. Oliver

Counsel for New York City Transit

Authority

Enclosures

cc:

Michele Farquhar

Ira Keltz

No. of Copies rec'd List ABCDE

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Lawrence G. Router President



June 20, 1996

VIA OVERNIGHT US POSTAL SERVICE

Philip M. Verveer, Esq.
Chairman, Public Safety Wireless Advisory Committee
c/o Willkie Farr & Gallagher
Three Lafayette Center
1155 21st Street, N.W.
Suite 600
Washington, D.C. 20036-3384

Re: Public Safety Mireless Advisory Committee Activities

Dear Chairman Verveer and Committee Members:

The New York City Transit Authority (NYCT) wishes to submit its Position Statement on various matters of concern which are currently pending before the Public Safety Wireless Advisory Committee (PSWAC). I returned to NYCT as its President approximately three months ago after serving in a similar capacity in Washington D.C. In the process of meeting with senior staff on the issues of concern to this agency. I recently became aware of the activities of PSWAC and its objective to address the long-term radio spectrum needs of the public safety community.

From the perspective of one who has spent considerable time managing the operations of several public agencies whose missions were to provide safe transportation for large numbers of people, I became concerned about the future consequences if public mass transit were not to be recognized for its vital role in public safety. Particularly given the considerable difficulty in ensuring adequate radio spectrum to meet what are, undeniably, public interest needs and the current discussions of auctioning radio frequencies in the future, I thought it appropriate for NYCT to prepare a statement explaining how the activities of mass transit providers significantly and directly impact the lives and safety of the people they serve. Mass transit providers, in this country and in

international locales, have mecently experienced acts of terrorism, and criminal activity, as well as collisions, derailments, fires and other emergencies. Their ability to prevent such occurrences or to mitigate the effects of any such emergencies and to expedite a rescue effort of passengers in their care, is highly dependent on ensuring effective and reliable voice and data communications capabilities.

The work of your committee is of critical importance to the public at large, and has the potential for long-range impacts for NYCT and other public mass transportation properties. Although my schedule and duties may not permit me to do so. I hope to be able to attend the next PSWAC Steering Committee meeting scheduled for June 25th to voice these concerns personally. In any event, NYCT representatives will be available to address these issues in the public comment portion of the meeting. In addition, I am requesting that the Steering Committee review and consider the enclosed material in their future deliberations.

If we can provide any additional information which would assist the Steering Committee in any way, please do not hesitate to contact me.

Sincerely.

'awrence G. Reuter

President

cc: All Committee Members and Alternates

PSWAC Subcommittee Chairs

Enclosures

New York City Transit Authority Position Statement

concerning

MATTERS BEFORE

THE PUBLIC SAFETY WIRELESS ADVISORY COMMITTEE (PSWAC)

New York City Transit Authority Position Statement Concerning Matters Before The Public Safety Wireless Advisory Committee (PSWAC)

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Introduction

The MTA-New York City Transit Authority (NYCT) wishes to submit this Position Statement to PSWAC, and appreciates the efforts of the Federal Communications Commission (FCC) and the National Telecommunications & Information Agency (NTIA) to address the communication needs of public safety providers through the year 2010. The activities of PSWAC will have long-term impact on the safety and security of the public, and for that reason alone, the importance of its work cannot be underestimated. In recognition of the value of the work being performed by PSWAC and its subcommittees, NYCT has been pleased to offer the assistance of its technical specialist on radio communications matters, Joseph Yurman, who has worked with various PSWAC subcommittees and work groups in their efforts to produce final reports.

NYCT also recognizes the efforts undertaken by APCO to insure that the users of the public safety spectrum are represented in the process undertaken by PSWAC. As noted in the APCO International Policy Statements Regarding PSWAC and its Subcommittee Reports (p. 5):

"public safety also includes a number of general governmental functions performed by federal, state, county and city agencies. This consists of many varied tasks. Whether it is for environmental control, highway maintenance or governmental mass transit, the use of wireless communications to perform these duties which serve taxpayers is growing. Demands upon all levels of government are increasing each year and, as a result, using radios has become a key to delivery of service. With continued budget constraints, 'Working Smarter' has become a necessity, not an option."

NYCT's purpose in submitting these comments is to augment that statement by describing the vital role communications plays in ensuring the public safety, as represented by a governmental entity providing mass transit services. While it may be the case that certain aspects of NYCT's operations might be considered unique because of its size and its location in one of the most densely populated (and most heavily congested, from a radio spectrum viewpoint) regions in the county, much of what is described below is applicable to other public mass transit providers.

This commentary will focus on several of the key issues before PSWAC, including the scope of the definition of "public safety", and will describe how mass transit impacts public safety and why it is necessary for such providers to be recognized in that context. It will then set forth NYCT's views on various policy issues being considered by PSWAC and its subcommittees, such as interoperability, re-farming, the issue of utilization of commercial services to meet future communications needs, and the concept of auctioning spectrum.

Executive Summary

- Public mass transit, because of the volume of people it carries daily, can have a profound and immediate impact on the safety of large numbers of people.
- Mass transit can also serve as a key component in local emergency management plans to evacuate people from areas of danger.

- Effective intra-agency communications systems and provision for interoperability among the multiple agencies responding to a mass transit incident and the transportation provider are critical for a variety of reasons:
 - * to prevent or minimize the likelihood of a major disaster;
 - * to mitigate the effects of an incident once it develops; and
 - * to insure the safety of passengers and responding personnel.
- NYCT depends upon prompt, reliable and effective voice communications

 including wireless communications to prevent accidents and to
 mitigate the harm that can occur in the wake of accidents, criminal attacks or natural disasters.
 - * Operating personnel with direct access to the public, such as token booth clerks, train operators and conductors, bus drivers, as well as transit police, firefighters and emergency medical rescue workers, must have access to wireless communications to prevent harm to the public. Transit personnel are seen as visible symbols of security because of their ability to summon help in the event of an emergency.
 - * Recent fatal accidents, both at NYCT and elsewhere, illustrate the critical need for effective wireless communications in the event of fires, collisions, derailments and other accidents, and the potential for even greater tragedy in the absence of such communications capabilities.
- NYCT urges the Public Safety Wireless Advisory Committee to recognize
 the public safety status and needs of public mass transit agencies
 and should recommend that they be protected in future rule-making
 proceedings in the following areas:
 - * Spectrum allocation

- * Access to frequencies
- * Re-farming requirements
- * Interoperability
- * Exemption from spectrum auctions

Interest of NYCT

NYCT is the nation's largest provider of mass transit services. It is a public authority, created by the State of New York, for the purpose of providing rapid transit (subway) and surface (bus) transportation services in the City of New York. It transports approximately 3.6 million passengers per average weekday on its subway facilities, while its bus operations carry approximately 1.5 million passengers each workday. NYCT provides essential public transportation services to the people of the City of New York 24 hours per day, 365 days a year. It is an affiliate of the Metropolitan Transportation Authority (MTA), also a public authority of the State of New York, which was created by the State Legislature to coordinate transportation policy in the New York metropolitan region.

Two MTA subsidiaries, the Long Island Rail Road (LIRR) and Metro-North Commuter Railroad (Metro-North) serve the suburban commuter population in the counties surrounding New York City. LIRR is the nation's largest commuter railroad, carrying in excess of 250,000 passengers per business day. Metro-North, which serves seven counties in New York State and

For a description of NYCT's current communications systems and the limitations inherent in its current rapid transit operations communications systems, see Appendix A to this commentary.

extends service to Fairfield and New Haven counties in the State of Connecticut, is responsible for the safe transportation of more than 200,000 people each average weekday. Another MTA affiliate, popularly known as MTA Long Island Bus, provides bus transportation services to Nassau County and Western Suffolk County on Long Island and provides service to Eastern Queens County in New York City. Its ridership is approximately 85,000 passengers per workday. The combined operations of these affiliates are quite notable: one out of three people who use public mass transit in the United States do so on a bus, subway or commuter train operated by an MTA-affiliated entity.

I. "Public Safety": Public Mass Transit and Its Role

NYCT is cognizant of the fact that many people initially and, quite understandably, associate the concept of "public safety" with the traditional role of emergency first responder, such as Police, Fire and EMS. At the same time, however, public mass transit has an immediate and direct impact on the lives and safety of the people it serves. In addition to the recognized areas of public concern such as collisions, derailments, other accidents, and criminal and terrorist acts occurring in its facilities, mass transit also serves in certain geographical areas as a key component in local emergency management plans to evacuate people from areas of danger.

One need only look at various mass transit incidents which occurred over the past 12-18 months, both in the United States and internationally, to comprehend that public mass transit, because of the volume of people it carries daily, can have a profound and immediate impact on the safety of large numbers of people. During this time, we have witnessed a terrorist gas attack on the Tokyo subway system, and terrorist bombings on the Moscow and Paris subways, as well as multiple bus bombings in Israel. During this same period

of time, there have been several fatal subway and commuter train collisions in this country, each of which underscored the consequences of systems heavily dependent on human performance factors to avoid injury.

NYCT itself experienced a fatal collision about one year ago when, on June 5, 1995 at 6:00 a.m., two subway trains collided on the Williamsburg Bridge (which connects two boroughs within New York City). Had this accident occurred later in the morning with both trains carrying peak rush-hour passenger loads, the consequences would have been far more tragic. In February 1996, a multiple fatality occurred when two New Jersey Transit commuter trains collided; shortly thereafter, in Silver Spring, Maryland, a commuter train and Amtrak passenger train collided causing multiple fatalities and other serious injuries. Each of these accidents have highlighted the continuing need to search for technological improvements which can minimize, if not eliminate, the deadly consequences of human error. Many of those solutions may themselves be dependent upon systems which need radio frequencies to function.

Moreover, effective intra-agency communications systems and provision for interoperability among the multiple agencies responding to a mass transit incident and the transportation provider are critical for a variety of reasons: to prevent or minimize the likelihood of a major disaster; to mitigate the effects of an incident once it develops; and to ensure the safety of passengers and responding personnel. NYCT will briefly address these various areas of concern and relate how communications can impact its ability to deal effectively with the complexity of managing a vast transportation network which serves millions of people per day.

A. Anti-Terrorism Efforts and Crime Control.

It is not NYCT's intention to raise undue alarm concerning the potential for a terrorist attack to occur on a public mass transit facility. At the same time, however, it would ill behoove mass transit providers to turn a blind eye to acts occurring elsewhere. News reports of the Tokyo gas attack, for example, emphasize the need to have as thorough an understanding of the nature of such an incident as possible before rescue personnel are themselves exposed to danger. The need for prompt, reliable and effective voice communications, particularly in the challenging environment of underground facilities, is clear.

For quite obvious reasons, we cannot discuss the security measures taken to address the considerable task of protecting a complex transportation system, such as NYCT's, which is largely open to the public and which encompasses more than 650 miles of track, 469 stations, 5800 subway cars and 3600 buses. NYCT's more than 40,000 employees serve as valuable resources to alert appropriate people to unusual behavior or to ensure that suspicious packages are not left unattended. Among other things, token booth clerks can use an Emergency Booth Communications System, which is a direct line to their Stations Command Center and has the ability for Police Officers to monitor the call directly, in order to convey information about criminal activity or unusual occurrences. Train operators, conductors and bus operators have the ability to communicate by two-way radio with NYCT Command Center personnel to summon help.

With respect to criminal activities occurring on a mass transit system, it is essential for passenger safety that passengers have access to personnel who can quickly summon assistance. While subway crime in NYCT has declined appreciably during the past five years and is at its lowest point in about 30 years, thanks to the efforts of the New York Police Department (NYPD) and the Transit Authority Police Department (TAPD), which merged with NYPD in April 1995, there is still an unease among passengers in the subway system, particularly at isolated locations or during off-peak hours, that they will be a victim of a criminal assault. For them, token booth clerks, train operators and conductors are seen as visible symbols of security because of their ability to summon help. NYCT's communications system for its buses is a relatively modern, trunked communication system, and bus operators can summon help through a "request to talk", "priority request to talk" or "silent alarm" feature. Because of this radio communications capability, bus operators serve as useful "eyes and ears" when events occur along their routes. The Surface (bus) Command Center can then advise police or other emergency responders of the locale of either a transit or non-transit emergency based upon information provided orally.

With respect to other criminal activities or need for police assistance, it should be noted that approximately one-half million school children use free or reduced fare privileges on NYCT buses and subways to travel to and from school. The after-school travel of large numbers of school children can give rise to special needs for police assistance, much of which is communicated by NYCT personnel through its radio system. So, too, the easy access to public mass transit facilities and their modest cost have, from time-to-time, made those facilities areas where homeless individuals, many of whom are emotionally disturbed, can congregate. These individuals can and do produce requests for police and medical assistance.

In addition to the periodic episodes of "street crime" which occur on subways or buses, mass transit has, within the last few years, been the scene of several criminal acts of considerable proportion. In a multiple slaying in December 1993, an individual opened fire on an LIRR evening commuter train. A little more than one year later, another individual, on two separate occasions, detonated fire bombs on NYCT subway trains producing grievous injuries. While these two latter events are, thankfully, not the type of problems routinely encountered by public mass transit providers, they are indicative of the widespread harm which can result when mass transit is the selected venue of a criminal act. For instance, prosecutors alleged in the firebombing case that the defendant had intended the second firebomb to explode in an underriver tunnel, thus maximizing the devastation and terror and thwarting any meaningful rescue effort since there are no emergency exits in such locations. Had such an event happened during rush hour, multiple trains carrying thousands of passengers could have been imperiled, since NYCT runs as many as 30 trains per hour along some lines during such periods. NYCT employees, such as token booth clerks, have also been the victims of vicious criminal assaults. Their Emergency Booth Communications System is an invaluable lifeline to secure help for themselves or our passengers.

B. Collisions, Derailments, Fires and Accidents

Public mass transit providers strive to perform their functions by the safest means possible and, in large measure, achieve that goal. Notwithstanding these efforts, there have been and doubtlessly will be, accidents or other emergency incidents which can quickly imperil the lives and safety of many people. Collisions and derailments often result in fatalities

and/or multiple serious injuries; they almost always result in a complicated rescue effort which requires coordination among many internal agency departments and personnel, as well as coordination with outside rescue personnel. Fire and smoke conditions are obvious public safety hazards, particularly in the confined environment of a subway. A determination to turn power off may leave passengers stranded in a dark and smoke-filled subway tunnel, with emergency lighting only, without air-conditioning (which would draw smoke into the subway cars) and may affect the ability of the crew to communicate via the public-address sytem. In such an environment, one can envision how quickly panic may set in. Multiple trains may be trapped behind the train closest to the fire, thus impacting, many times over, the number of passengers affected.

1. The Clark Street Fire

This incident typifies the complexity of mass transit operations, the direct impact mass transit providers have on people's lives and the vital role communications capabilities can have on the safety of the public. At an older system, such as NYCT's, there is no automatic train location system — in other words, the radio system must be used to locate all trains in the vicinity of an incident, to hold back other trains from entering the area, to re-route trains around the danger zone, and to coordinate a plan to rescue the trapped passengers. All of this takes valuable time and must be accomplished at the same time the radio is being used to ascertain from the initial crew member vital information on the nature of the emergency, and updates on the incident, to give instructions to that crew and to coordinate rescue operations. Following below is a summary of the problems encountered when a fatal fire occurred at NYCT's Clark Street Station in Brooklyn in December

1990.² In addition to two deaths, more than 200 people were injured. The report underscores the complexities inherent in dealing with a subway fire emergency, the frailties of the existing rapid transit communications system, and the difficulties in coordinating intra- and inter-agency rescue operations.

- Five trains had to be safely moved from the danger area, three of which were in the East River underriver tunnels, with two of those having to be "reverse-railed" to safety, meaning their movement had to be accomplished without the protection of the signal system, and the moves had to be coordinated carefully to insure that there was no collision with an oncoming train.
- Considerable time was spent in locating all trains in the area or about to enter the immediate vicinity and contacting tower operators in order to coordinate the halting of all advancing trains, and the safe movement and safe evacuation of passengers from trains in the immediate vicinity. This needed to be accomplished via voice radio communications with many transmissions needing to be repeated in order to be understood.
- Transmission to the Command Center of the initial reports of a fire/explosion/smoke condition were not acknowledged; tower operators who heard the attempted radio transmission actually telephoned the information to the Command Center.
- The train operator who reported the explosions orally gave his position as being both "north" and "south" of the Clark Street Station, a critical fact since north meant the fire would be located within the underriver tunnel. Some time was lost in pinpointing, via voice communications only, the exact location of this subway train.
- The train which was most endangered had to be reverse-railed to a different station, requiring the train operator to move passengers away from the smoke condition, walk to the end of the multi-car train and move the train into the station to evacuate passengers. In the process of this move, he encountered a

The summary consists of excerpts from a NYCT Board of Inquiry Report on the Fire, which are annexed as Exhibit B.

passenger with a possible cardiac arrest, and relayed that information, via radio, to the Command Center. Upon reaching the reverse end of the train, he reported that emergency brakes had been engaged, which required them to be reset before the train could move.

- Most emergency rescue personnel were dispatched to the Clark Street Station, the site of the initial fire (and evacuation of passengers from one train), while many injured people were on what ultimately proved to be the most endangered train which was reverse-rail moved away from the fire to another station. Additional emergency assistance had to be sent to that station.
- Emergency rescue personnel were also dispatched to the Wall Street station in Manhattan because three trains in the underriver tunnels were moved there to evacuate their passengers, and it was not known the extent to which those passengers may have been exposed to smoke conditions. In addition, the "wrong-rail" moves of two of those trains posed their own dangers and, in the event of a collision, emergency personnel would have been needed at Wall Street.

Many lessons were learned from the Clark Street Fire, and many changes made to improve NYCT's ability to handle a similar situation and to give better information to emergency responders. At the same time, however, there continues to exist real and significant constraints on the ability to obtain "real time" information on developing conditions affecting the safety of our passengers and to pass that information along to rescue personnel, caused in large measure by the limitations of an older radio system. In events such as this, there is a need for coordination among the NYCT Command Center and multiple internal operating personnel (train operators, conductors, tower operators, etc.) and infrastructure personnel responsible for coordinating fan operations (to evacuate smoke) and power distribution (to effect whether power is on or off — critical both to the safety of rescue personnel and the movement of the endangered passengers). NYCT Command Center must notify various outside emergency responders (Police, Fire, EMS), providing the best information as to the actual conditions they will encounter. While the lack

of interoperability is discussed separately below, the Clark Street Fire rescue effort was hampered by the inability of the older NYCT communications system to enable the Command Center to quickly locate all affected or possibly affected trains and passengers and to obtain reliable updates on conditions as they developed.

2. Other Emergencies/Incidents

From time-to-time, collisions, derailments, track fires and other incidents can arise which threaten the safety of our passengers. always, there is a need to ascertain promptly the nature of the incident, the extent of any injuries and the location of other trains potentially impacted by the unfolding incident. Since one rush hour train may carry one-to-two thousand people, a major disaster can quickly develop. In the case of an incident producing large numbers of less severe injuries, NYCT's bus communications system may be utilized to deploy buses to assist in the evacuation of passengers and transport them to local area hospitals. smaller-scale medical emergencies (e.g., a passenger with a heart attack), an effective communications system is necessary to summon medical help and arrange for the passenger's safe removal to the hospital. Whether there exists a small-scale or large-scale emergency, public mass transit providers have a clear-cut obligation to do all they can to protect the public entrusted to their care.

C. "Routine" Operational Matters

In addition to the life-threatening emergencies described above, public mass transit providers routinely encounter many operational issues which could themselves develop quite rapidly into a major emergency. One recent example is described here. On May 1st of this year, some debris became

wedged near the third rail at the 51st Street and Lexington Avenue subway Electrical arcing occurred which produced station in midtown Manhattan. considerable smoke and noise which sounded like explosions. Police, Fire and EMS were notified and NYCT personnel were dispatched to the scene. While the cause of the problem was identified and resolved from a maintenance perspective in a little more than one-half hour, the presence of passengers on the roadbed prevented the restoration of power. Since power then had to be turned off for an extended area, many more passengers had to be evacuated from trains stranded in tunnels. Before power could be safely restored in such a situation, personnel must walk the tracks to ensure that no passengers would be endangered, and all rescue personnel must be accounted for. instance, the lack of interoperability was a major impediment. The net result was a total suspension of subway service along most of the East Side of Manhattan for more than three hours. In all, passengers from five subway trains were evacuated through subway tunnels. This incident demonstrates that even routine incidents on a mass transit system can have major public safety impacts in a brief period of time.

D. <u>Non-Transit Related Emergencies</u>

Whether it is the World Trade Center Bombing, a water main break which floods the subway signal system, or a loss of electric power in an area of New York City, mass transit must respond immediately and make adjustments in order to safely transport people around or away from the area of danger. On April 23rd of this year, a Con Edison transformer failed near a major downtown Brooklyn subway "hub" station, knocking out the AC power to the signal system on the Manhattan Bridge and in surrounding tunnels leading to the affected Station. Thousands of passengers had to be safely evacuated from

ten stranded trains and many more passengers were re-routed on their homeward journey away from the area. The safe movement of trains on the Bridge and in the tunnels leading to the station needed to be carefully coordinated through voice communications, lest a collision occur, since the protection of the signal system was not there. NYCT, Police, Fire and EMS personnel were all involved in the lengthy, but successful, rescue effort.

Unanticipated events, such as moderate-to-severe snowfalls or a large-scale workplace dismissal in Manhattan, such as occurred immediately after the World Trade Center Bombing, place considerable strains on public mass transit to respond quickly and efficiently. Many NYCT platforms, for example, are narrow and the presence of an unusually large crowd waiting for trains could quickly produce a dangerous condition.

E. Special Events

Public mass transit plays an important role in ensuring that large crowd conditions can be safely managed when major public events occur. The City of New York was one of the stops on the Papal visit to the United States last year. This event was followed a few weeks later by the 50th Anniversary Celebration of the United Nations, which brought many foreign leaders to the City. Frequent visits by the President and other dignitaries can cause local street congestion and other impediments to the typical flow of pedestrians and travelers. Mass transit is invariably seen as the best way to travel during these occasions. NYCT's bus communications system can respond to conditions as they unfold by alerting operators on a "routes affected" basis to diversions which will take their passengers away from congested or potentially dangerous areas. Large scale events require careful coordination among police, other public officials, and mass transit providers to ensure the safety of the public.

The ability to prepare for or respond to all of these events, in large measure, is dependent on communications systems which are reliable and which meet the needs of an entity required to move large numbers of people safely and efficiently.

F. Mass Transit's Role In Regional Emergency Management

Public mass transit can and does serve as a vital resource to evacuate people from areas of danger. Within the last few years, a major storm produced severe localized flooding in oceanfront areas of Brooklyn and Queens. NYCT's bus system was dispatched to evacuate people from areas of danger.

Although it is not a City agency, NYCT serves as a key participant in New York City's Office of Emergency Management, not only because of its need for emergency assistance, but also because of its ability to move large numbers of people quickly from areas of danger. This group participates in periodic emergency drills and meets to review and critique virtually all emergency incidents occurring within the City.

Public mass transit, while perhaps different from Fire, Police and EMS personnel, nevertheless has a substantial, direct, and immediate impact on the public safety. Ordinary human failures in mass transit can have consequences of the deadliest proportion affecting a considerable number of people. Its personnel must respond to the scene, assist in the resolution of the crisis, and work with rescue personnel to ensure the safety of our passengers. Even moderate problems can quickly develop into major emergencies. Public mass transit has a demonstrable need for, and reliance upon, effective voice and data communications systems to perform its mission to serve the community by safely transporting the riders who depend on it daily.

II. Interoperability

As is clear from the discussion above, NYCT relies on the emergency response providers within the City of New York to address emergencies requiring police, fire and medical assistance. The harsh subway environment and the incompatibility of radio systems imposes severe obstacles on the ability of the various agencies to communicate with NYCT, with each other and with their own above-ground personnel. Existing procedures frequently call for firefighters to maintain line-of-sight contact with their own personnel to ensure that rescue workers are not threatened by conditions they encounter in the subway, such as smoke, fire, restoration of power to the third rail, etc. Channels for interoperability are, of course, critical to the public safety, but interoperability alone cannot address limitations inherent in the public agencies' own communications systems. In the examples described in Part I, interoperability would have indeed facilitated communications with Police, Fire and EMS command posts. In order to achieve the ultimate objectives, however, NYCT must be capable of using its own communications system to learn quickly the magnitude and location of the events unfolding in order to relay those conditions to the appropriate personnel at the other agencies.

III. <u>Re-Farming</u>

NYCT is acutely aware that frequencies are invaluable assets, and that public safety providers have an obligation to utilize radio spectrum in as efficient a means possible. At the same time, however, there are severe financial constraints on all public entities which will affect their ability to replace or convert costly communications equipment. For that reason, NYCT urges recognition of a continued need for flexibility in meeting timetables

for re-farming. Major capital projects for future communications systems should, of course, be accomplished in a spectrum efficient manner. NYCT is committed to meeting that objective when it expects to replace its rapid transit communications system in the next few years. It would also urge consideration of approaches which might encourage public entities to re-farm as soon as possible. If feasible, public entities should be given latitude to meet their own future communications needs by being permitted to, in essence, re-farm the frequencies first for their own use.

IV. Reliance on Commercial Services

Public mass transit agencies cannot be required to rely on commercial services to meet their needs. In the case of a vast network, such as NYCT's, there is little reason to believe that commercial services would even be interested in providing effective coverage over a network consisting of hundreds of miles of underground track, elevated stations, and far-flung support functions, much less willing to guarantee unimpeded access 24 hours per day. While commercial services might well be a useful adjunct for certain needs, and NYCT, in fact, uses some SMRS services to meet limited stand-alone needs, its overall communications requirements necessary to support a complex transportation system require a detailed and customized approach and substantial investment of capital. Reliance on commercial services is simply not a viable option.

V. <u>Auctioning Radio Spectrum</u>

Public mass transit providers need to be protected from the risk that they will be unable to provide safe transportation because they cannot afford the costs of obtaining radio spectrum to meet their needs. Auctioning spectrum to meet the requirements of governmental agencies is both unwise and unworkable.

Conclusion

NYCT appreciates this opportunity to present its concerns as a public mass transit agency. Specifically, it urges PSWAC to recognize that there are many vital governmental functions which have important impacts on the life, health and safety of the people served. Public mass transit is not only an essential governmental function, it also is intricately and intimately involved in critical public safety duties — it is entrusted with the safe transportation of millions of people each working day.

EXHIBIT A

Description of NYCT Communications Systems

Summary of Communications Systems

Subway Radio System

NYCT's subway radio system is an older system which is anticipated to be replaced with a new rapid transit operations and command center around the turn of the century. It currently is a "voice only" system and operates in the VHF band with separate frequencies for the IRT, BMT and IND divisions. The Command Center relies on the oral communications from crew members to ascertain the status of incidents, the location of trains, and similar information. As noted in the Safety Board of Inquiry concerning the Clark Street Fire:

"One of the difficulties faced by Command Center personnel is physically locating trains on the system. The technology being used is dated (circa 1950) and does not provide train occupancy (where trains are located) for 90% of the system. Command Center personnel must rely on towers and direct radio communications to establish train locations. This can be a difficult, time consuming task, that if not quickly accomplished, can have adverse effects on rescue efforts.

"It appears to the Board that an effort to modernize Command Center facilities is required if these kinds of difficulties are to be overcome."

The radio system is largely an inflexible one, with no ability to isolate particular geographical areas in the event of an emergency. It is necessary for a "clear the air" command to be given in many emergency situations, making it impossible for less significant problems to be handled simultaneously by Command Center personnel.

While it is anticipated that some of these deficiencies can be addressed with a major capital investment for a new command center, in order to alleviate the inefficiencies of the existing radio system, additional frequencies will be required to enable the transmission of voice and data and to provide interoperability with emergency first responders.